

SAFETY DATA SHEET

According to article 31 and Annex II of the EU REACH Regulation

Version: 4.0

Revision Date: 08.10.2012

Superseded date: 20.01.2010

MOLYKOTE(R) 1000 SPRAY**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY**

1.1 Product name	: MOLYKOTE(R) 1000 SPRAY	
1.2 Identified uses	: Lubricants and additives	
Uses advised against	: None known.	
1.3 Company	: Dow Corning Europe S.A. rue Jules Bordet - Parc Industriel - Zone C B-7180 Seneffe Belgium	
E-mail address (Safety Data Sheet)	: sdseu@dowcorning.com	
Customer Service	: English Deutsch Français Italiano Español	Tel: +49 611237507 Tel: +49 611237500 Tel: +32 64511149 Tel: +32 64511170 Tel: +32 64511163 Fax: +32 64888683
1.4 Emergency Phone Number	: Dow Corning (Barry U.K. 24h) Dow Corning (Wiesbaden 24h) Dow Corning (Seneffe 24h)	Tel: +44 1446732350 Tel: +49 61122158 Tel: +32 64 888240

2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

According to EU Directives 67/548/EEC or 1999/45/EC:

R12 Extremely flammable.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67 Vapours may cause drowsiness and dizziness.

2.2 Label elements**Labelling according to EEC Directive**

Symbols	: F+ Extremely flammable.
R-phrases	: R12 Extremely flammable. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R67 Vapours may cause drowsiness and dizziness.
S-phrases	: S2 Keep out of the reach of children. S16 Keep away from sources of ignition - no smoking. S23(S) Do not breathe spray.

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S24/25 Avoid contact with skin and eyes.

S41 In case of fire and/or explosion do not breathe fumes.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Do not spray on a naked flame or any incandescent material.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Hydrocarbon aerosol propellant**According to EU Directives 67/548/EEC or 1999/45/EC:**

Name	CAS-No.	EINECS/ ELINCS No.	REACH Registration Number	Conc. (% w/w)	Classification	
Butane	106-97-8	203-448-7	-	53.0	F+	R12
Naphtha (petroleum), hydrotreated heavy	64742-48-9	265-150-3	-	15.0	Xn	R10 R65 R66 R67 R52/53
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	265-169-7	-	9.5	Substance with a Community workplace exposure limit	
Distillates (petroleum), solvent dewaxed light paraffinic; baseoil - unspecified	64742-56-9	265-159-2	-	9.5	Substance with a Community workplace exposure limit	
Calcium fluoride	7789-75-5	232-188-7	-	5.0	Substance with a Community workplace exposure limit	
Graphite	7782-42-5	231-955-3	-	2.5	Substance with a Community workplace exposure limit	
Copper	7440-50-8	231-159-6	-	1.8	N	R50
Polybutene	9003-29-6	Exempt or not available	-	1.4	Substance with a Community workplace exposure limit	
Zinc	7440-66-6	231-175-3	-	0.9	F	R15 R17
					N	R50/53

According to Regulation (EC) No. 1272/2008:

Name	CAS-No.	EINECS/ ELINCS No.	REACH Registration Number	Conc. (% w/w)	Classification
Butane	106-97-8	203-448-7	-	53.0	Flammable gas: Category 1 - H220 Gases under pressure: Liquefied gas - H280
Naphtha (petroleum), hydrotreated heavy	64742-48-9	265-150-3	-	15.0	Flammable liquid: Category 3 - H226 Specific target organ toxicity - single exposure (Inhalation - vapour): Category 3 (narcotic effects) - H336 Aspiration hazard: Category 1 - H304

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Chronic aquatic hazard: Category 3 - H412
EUH066

Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	265-169-7	-	9.5	Substance with a Community workplace exposure limit
Distillates (petroleum), solvent dewaxed light paraffinic; baseoil - unspecified	64742-56-9	265-159-2	-	9.5	Substance with a Community workplace exposure limit
Calcium fluoride	7789-75-5	232-188-7	-	5.0	Substance with a Community workplace exposure limit
Graphite	7782-42-5	231-955-3	-	2.5	Substance with a Community workplace exposure limit
Copper	7440-50-8	231-159-6	-	1.8	

Acute aquatic hazard: Category 1 - H400

Polybutene	9003-29-6	Exempt or not available	-	1.4	Substance with a Community workplace exposure limit
Zinc	7440-66-6	231-175-3	-	0.9	Pyrophoric solid: Category 1 - H250 Substances and mixtures, which in contact with water, emit flammable gases: Category 1 - H260

Acute aquatic hazard: Category 1 - H400
Chronic aquatic hazard: Category 1 - H410

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

CLP classifications are based on all current available data including from known international organizations. These classifications are subject to revision as more information becomes available.

4. FIRST AID MEASURES

4.1 Description of First Aid Measures:

- On contact with eyes** : Flush with water.
- On skin contact** : Flush with water.
- If inhaled** : Remove to fresh air. Obtain medical attention immediately.
- On ingestion** : Obtain medical attention.

- 4.2 Most important symptoms/effects, acute and delayed** : Vapours may cause drowsiness and dizziness.

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MOLYKOTE(R) 1000 SPRAY**5. FIRE-FIGHTING MEASURES**

- 5.1 Suitable extinguishing media** : On large fires use dry chemical, foam or water spray (fog). On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.
- Unsuitable extinguishing media** : None known.
- 5.2 Hazards during fire fighting** : Pressurised container capable of exploding if heated. Toxic vapours are evolved.
- Hazardous Combustion Products** : Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Nitrogen products. Sulphur products. Toxic vapours of fluorinated compounds.
- 5.3 Special protective equipment/procedures** : A self-contained respirator and protective clothing should be worn. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures** : A self-contained respirator and protective clothing should be worn. Determine the need to evacuate or isolate the area according to your local emergency plan. Eliminate all possible sources of ignition.
- 6.2 Environmental precautions** : Do not empty into drains. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.
- 6.3 Methods and materials for containment and cleaning up** : Determine the need to evacuate or isolate the area according to your local emergency plan. Eliminate all possible sources of ignition.

7. HANDLING AND STORAGE

- 7.1 Advice on safe handling** : General ventilation is required. Local ventilation is required. Do not breathe spray or mist. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - no smoking. Do not breathe vapour. Avoid skin and eye contact. Do not empty into drains.
- 7.2 Advice on storage** : Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Store in a flameproof, well ventilated area. Storage temperature: maximum 50 °C
- 7.3 Specific uses** : Refer to technical data sheet available on request.

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MOLYKOTE(R) 1000 SPRAY**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****8.1 Control parameters**

Name	CAS-No.	Exposure Limits
Butane	106-97-8	600 ppm TWA 750 ppm STEL 1,450 mg/m ³ TWA 1,810 mg/m ³ STEL
Naphtha (petroleum), hydrotreated heavy	64742-48-9	10 mg/m ³ STEL Oil Mist,mineral 5 mg/m ³ TWA Oil Mist,mineral
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	10 mg/m ³ STEL Oil Mist,mineral 5 mg/m ³ TWA Oil Mist,mineral
Distillates (petroleum), solvent dewaxed light paraffinic; baseoil - unspecified	64742-56-9	10 mg/m ³ STEL Oil Mist,mineral 5 mg/m ³ TWA Oil Mist,mineral
Calcium fluoride	7789-75-5	2.5 mg/m ³ TWA as F "inorganic"
Graphite	7782-42-5	10 mg/m ³ TWA Inhalable dust 4 mg/m ³ STEL Respirable dust
Copper	7440-50-8	1 mg/m ³ TWA as Cu Inhalable dust 2 mg/m ³ STEL as Cu Inhalable dust 0.2 mg/m ³ TWA as Cu Fume
Polybutene	9003-29-6	10 mg/m ³ STEL Oil Mist,mineral 5 mg/m ³ TWA Oil Mist,mineral
Zinc	7440-66-6	4 mg/m ³ TWA Respirable dust 10 mg/m ³ TWA Inhalable dust

8.2 Exposure controls

Engineering Controls : Ventilation : Refer to Section 7.1

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MOLYKOTE(R) 1000 SPRAY**Personal protection equipment**

- Respiratory protection** : A suitable respirator must be worn if the product is used in any circumstances where an aerosol or mist may be generated, such as during spraying or similar activities. Suitable respiratory protection should be worn if the product is used in large quantities, confined spaces or in other circumstances where the OEL may be approached or exceeded.
Depending on the working conditions, wear a respiratory mask with filter(s) AXP or use a self-contained respirator.
The choice of a filter type depends on the amount and type of chemical being handled in the workplace. Regarding filter characteristics, contact your respiratory protection supplier.
- Hand protection** : Chemical protective gloves should be worn: Nitrile rubber. 4H(TM). Polyvinyl alcohol(PVA). Viton(TM). Regarding glove's breakthrough time, contact your chemical protective glove supplier.
- Eye/face protection** : Safety goggles should be worn.
- Skin protection** : Wear impervious overalls in circumstances where significant skin contact can occur.
- Hygiene measures** : Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.
- Additional information** : For further information regarding the use of silicones / organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these types of materials in consumer aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact the Dow Corning customer service group. For further information regarding the use of silicones / organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these types of materials in consumer aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact the Dow Corning customer service group.
- Environmental exposure controls** : Refer to section 6 and 12.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form** : Aerosol
- Colour** : Brown
- Odour** : Solvent
- Specific Gravity** : 0.67

The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.

10. STABILITY AND REACTIVITY

- 10.1 Reactivity** : None known.

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10.2 Stability	: Stable under normal usage conditions.
10.3 Possibility of hazardous reactions	: None known.
10.4 Conditions to avoid	: Eliminate all possible sources of ignition.
10.5 Materials to avoid	: Can react with strong oxidising agents.
10.6 Hazardous decomposition products	: Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Nitrogen products. Sulphur products. Toxic vapours of fluorinated compounds.

11. TOXICOLOGICAL INFORMATION**Acute toxicity:**

On contact with eyes	: Slightly irritating.
On skin contact	: Slightly irritating.
If inhaled	: Single exposure may cause transient drowsiness and dizziness. May cause pulmonary oedema and pneumonitis.
On ingestion	: Small amounts transferred to the mouth by fingers during use should not injure.

Chronic toxicity:

On skin contact	: Can irritate on prolonged or repeated skin contact.
If inhaled	: May cause pulmonary oedema and pneumonitis.
On ingestion	: Small amounts transferred to the mouth by fingers during use should not injure.

Toxicokinetics, metabolism and distribution : No specific information is available.

Other Health Hazard Information : Product may emit formaldehyde vapour at temperatures above 150°C in the presence of air. Formaldehyde vapour is a suspected carcinogen, toxic by inhalation and irritating to eyes and the respiratory system. Exposure limits should be strictly respected.

¹ Based on product test data.

² Based on test data from similar products.

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MOLYKOTE(R) 1000 SPRAY**12. ECOLOGICAL INFORMATION****12.1 Ecotoxicity effects**

Harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

12.2 Persistence and degradability

Organic solvents may evaporate into the atmosphere, where they degrade. The mineral oils in the product are biodegradable.

12.3 Bioaccumulation

Low potential to bioaccumulate.

12.4 Release to waters / Mobility in soil**Fate and effects in waste water treatment plants:**

May cause adverse effects on bacteria. If used as intended this product is not expected to reach waste water treatment plants.

13. DISPOSAL CONSIDERATIONS

Product and packaging disposal : Dispose of in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

14. TRANSPORT INFORMATION**Road / Rail (ADR/RID)**

UN No. : UN 1950

Proper Shipping Name : AEROSOLS

Class : 2

Labels : 2.1

Sea transport (IMDG)

UN No. : UN 1950

Proper Shipping Name : AEROSOLS

Class : 2.1

Emergency Schedule : F-D

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MOLYKOTE(R) 1000 SPRAY**(EmS)** S-U**Air transport (IATA)****UN No.** : UN 1950**Proper Shipping Name** : Aerosols, flammable**Class** : 2.1**Labels** : Flammable Gas

: Apply Gross Wt Supplemental Label to Outer Package if shipping Limited Quantity

15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Status****EINECS** : All ingredients listed, exempt or notified (ELINCS).**TSCA** : All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.**AICS** : All ingredients listed, exempt or notified.**IECSC** : All ingredients listed or exempt.**KECL** : All ingredients listed, exempt or notified.**PICCS** : All ingredients listed, exempt or notified.

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MOLYKOTE(R) 1000 SPRAY**16. OTHER INFORMATION**

This product safety data sheet was prepared in compliance with article 31 and Annex II of the EU REACH Regulation as well as its relevant amendments, on the approximation of laws, regulations and administrative provisions relative to the classification, packaging and labelling of dangerous substances and preparations.

It is the responsibility of persons in receipt of this Product Safety Data Sheet to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces a formulation containing the Dow Corning product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the Dow Corning Product Safety Data Sheet to their own Product Safety Data Sheet in compliance with article 31 and Annex II of the EU REACH Regulation.

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. Dow Corning shall not be held responsible for any defect in the product covered by this SDS, should the existence of such defect not be detectable considering the current state of scientific and technical knowledge.

As stated above, this Safety Data Sheet has been prepared in compliance with applicable European law. If you purchase this material outside Europe, where compliance laws may differ, you should receive from your local Dow Corning supplier a SDS applicable to the country in which the product is sold and intended to be used. Please note that the appearance and content of the SDS may vary - even for the same product - between different countries, reflecting the different compliance requirements. Should you have any question, please refer to your local Dow Corning supplier.

Source of information: Internal data and publically available information

R10 Flammable., **R12** Extremely flammable., **R15** Contact with water liberates extremely flammable gases., **R17** Spontaneously flammable in air., **R50** Very toxic to aquatic organisms., **R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment., **R52/53** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment., **R65** Harmful: May cause lung damage if swallowed., **R66** Repeated exposure may cause skin dryness or cracking., **R67** Vapours may cause drowsiness and dizziness.

H220 Extremely flammable gas., **H226** Flammable liquid and vapour., **H250** Catches fire spontaneously if exposed to air., **H260** In contact with water releases flammable gases which may ignite spontaneously., **H280** Contains gas under pressure; may explode if heated., **H304** May be fatal if swallowed and enters airways., **H336** May cause drowsiness or dizziness., **H400** Very toxic to aquatic life., **H410** Very toxic to aquatic life with long lasting effects., **H412** Harmful to aquatic life with long lasting effects.